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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,159	07/06/2000	Akihiro Tominaga	KOIK-T0840	5460
29175	7590	08/25/2004	EXAMINER	
BELL, BOYD & LLOYD, LLC			CHANG, JUNGWON	
P. O. BOX 1135			ART UNIT	
CHICAGO, IL 60690-1135			PAPER NUMBER	
			2154	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/611,159	<b>Applicant(s)</b> TOMINAGA ET AL.	
	<b>Examiner</b> Jungwon Chang	<b>Art Unit</b> 2154	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on amendment filed on 5/17/2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**FINAL ACTION**

1. This office action is responsive to the amendment filed on May 17, 2004. Claims 19-24 are canceled and claims 1-18 are presented for examination.

2. This Office action has an attached requirement for information under 37 C.F.R. § 1.105. A complete response to this Office action must include a complete response to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

In response to this requirement, please provide a copy of each of the ~~following~~ <sup>NE</sup> items of art referred to in the specification on page 9, lines 8-18.

3. The disclosure objection is withdrawn based on the amendment filed on May 17, 2004.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The claim language in the following claims is not clearly understood:
  - i. As to claim 1, line 8, it is not clear whether “a lower order server” refers to “a lower order server” in line 7 (i.e., if they are the same, then it should “said lower order server”);
  - ii. Line 10, it is uncertain whether “said lower order lower order server” refers to “a lower order server” in line 7;
  - iii. Line 14, it is uncertain whether “said lower order-lower order server” refers to “a lower order server” in line 7;
  - iv. Line 16, it is uncertain whether “said lower orderlower order server” refers to “a lower order server” in line 7;
  - v. As to claim 2, line 2, it is uncertain whether “said lower orderlower order server” refers to “a lower order server” in claim 1, line 7;
  - vi. As to claims 3 and 4, they have the same deficiency as claim 2 above.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5, 7-11 and 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Bahlmann (US 6,578,074 B1).

8. As to claim 1, Bahlmann discloses the invention as claimed, including an automatic address management method comprising:

(a) establishing a fixed address (static IP address) for a core network portion (backbone, 104, fig. 1) having predetermined interconnection (core network (backbone) that provides interconnection between the networks) (static IP address pre-assigned to the client (a static assignment); col. 6, lines 18-20);

(b) dynamically connecting a terminal network portion (stub network or sub-network; 118, fig. 1) to said core network portion (backbone, 104, fig. 1), in which an upper-lower order relation is established (fig. 8, col. 10, lines 30-43) such that an upper order server (DHCP server, BOOTP server, Dynamic DNS server; 100, 102, 112, fig. 1; master DHCP/BOOTP server; 800, fig. 8) allocates an address block to a lower order server (computer, 130-136, fig. 1; Slave DHCP server, fig. 8) (i.e., IP address allocation; col. 1, lines 9-19; IP addresses are allowed to lease to their client who want Internet access; col. 1, lines 47-65; allocating network address from one of multiple pools of addresses; col. 3, lines 60-64) and a lower order server returns the address block to the upper order server (i.e., operation of the DHCP server program involves releasing leases; col. 5, lines 40-42; give up the lease by issuing a release message to the server; col. 11, lines 17-20);

(c) establishing a link to said lower order server (computer, 130-136,

fig. 1; Slave DHCP server, fig. 8) contained in said terminal network portion (stub network or sub-network; 118, fig. 1) to a segment contained in said core network portion (backbone, 104, fig. 1) (i.e., backbone network (core network) may be connected to network segments, and sub-networks; col. 5, lines 1-15);

(d) requesting allocation of an address block to the upper order server supervising said segment by lower order server (i.e., DHCP server program receives the lease discover message from the client; col. 6, lines 25-27; col. 3, lines 60-64; col. 5, lines 53-58; col. 8, lines 37-45); and

(e) distributing the address block in said terminal network portion through said lower order server (i.e., offer a routable network lease (i.e., static IP address range); 306, fig. 3; col. 6, lines 60-62; offer a non-routable network lease (i.e., dynamic IP address range); 308, fig. 3; col. 6, lines 53-65).

9. As to claims 2 and 3, Bahlmann discloses representative server requests connection using an already known address owned by an upper order server of said segment (col. 11, lines 44-48).

10. As to claim 4, Bahlmann discloses DHCP (Dynamic Host Configuration Protocol) or IPCP (Internet Protocol Control Protocol) (col. 4, lines 52-58).

11. As to claim 5, Bahlmann discloses if an upper order server receiving an address block allocation request does not own a sufficient address pool, an address block allocation request is recursively issue to a further upper order

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server (fig. 8; col. 10, lines 30-43).

12. As to claim 7, it is rejected for the same reasons set forth in claim 1 above. In addition, Bahlmann discloses a route system for network (backbone, 104, fig. 1; headend, 114, 116, fig. 1; relay agent, 214, 215, fig. 2; col. 5, lines 1-15; a terminal network portion with dynamic address.

13. As to claim 13, it is rejected for the same reasons set forth in claims 1 and 7 above. In addition, Bahlmann discloses program furnishing medium for furnishing a computer program in a tangible and computer-readable form (200, 208, 210, 212, fig. 2; col. 5, lines 25-39; col. 9, lines 46-60).

14. As to claims 8, 9, 14 and 15, they are rejected for the same reasons set forth in claims 2 and 3 above.

15. As to claims 10 and 16, they are rejected for the same reasons set forth in claim 4 above.

16. As to claims 11 and 17, they are rejected for the same reasons set forth in claim 5 above.



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17. Claims 6, 12 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

18. Applicant's argument's filed on 5/17/2004 for claims 1-18 have been fully considered but they are not deemed to be persuasive.

19. In the remarks, applicant argued in substance that (1) Bahlmann does not deal with the allocation and distribution of "an address block" as claimed in the present invention. (2) The disclosure in Bahlmann, specifically teaches the use of a single address (see, e.g., col. 6, lines 5-8, 55-59).

20. Examiner respectfully traverses applicant's remark.

As to point (1), Bahlmann clearly discloses allocating (i.e., IP address allocation; col. 1, lines 9-19; IP addresses are allowed to lease to their client who want Internet access; col. 1, lines 47-65; allocating network address from one of multiple pools of addresses; col. 3, lines 60-64) and distributing of an address block (i.e., offer a routable network lease (i.e., static IP address range); 306, fig. 3; col. 6, lines 60-62; offer a non-routable network lease (i.e., dynamic IP address range).

As to point (2), Bahlmann clearly discloses use of address block (i.e., provides a logical link that defines the IP address range from which the DHCP server should

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dispense IP addresses; col. 2, lines 1-3; dividing the IP address into a primary routable address range (i.e., static address range), a non-routable secondary IP address range (i.e., dynamic address range); col. 7, lines 20-25; parameters are required at each headend 114-16 such as the network base address, subnet masks, gateway addresses, and various IP address blocks; col. 7, lines 32-35).

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

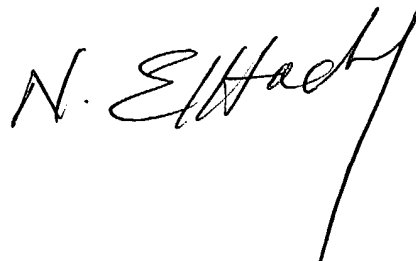
22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is (703)305-9669. The examiner can normally be reached on 9:30-6:00 (Monday-

Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWC  
August 20, 2004

A handwritten signature in black ink, appearing to read "N. El-Hach", with a long, sweeping vertical stroke extending downwards from the end of the signature.